

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:
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HAZLET, NJ 07730

PCT

WRITTEN OPINION

(PCT Rule 66)

Applicant's or agent's file reference FLARION-4/PC		Date of Mailing (day/month/year) 24 FEB 2004
International application No. PCT/US02/06265		REPLY DUE within 2 months/days from the above date of mailing
International filing date (day/month/year) 04 March 2002 (04.03.2002)	Priority date (day/month/year) 09 March 2001 (09.03.2001)	
International Patent Classification (IPC) or both national classification and IPC IPC(7): H04L 7/033, 27/66 and US Cl.: 370/208, 350, 375/364		
Applicant FLARION TECHNOLOGIES, INC.		

- This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority.
- This opinion contains indications relating to the following items:
 - ☒ Basis of the opinion
 - ☐ Priority
 - ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☐ Lack of unity of invention
 - ☒ Reasoned statement under Rule 66.2 (a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☐ Certain documents cited
 - ☐ Certain defects in the international application
 - ☐ Certain observations on the international application
- The applicant is hereby invited to reply to this opinion.

When? See the time limit indicated above. ~~The applicant may, before the expiration of that time limit, request this Authority to grant an extension. See rule 66.2(d).~~

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis.
For an informal communication with the examiner, see Rule 66.6

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
- The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 09 July 2003 (09.07.2003)

Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230	Authorized officer <i>[Signature]</i> Duc Ho Telephone No. 703-305-1332
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Form PCT/IPEA/408 (cover sheet)(July 1998)

WRITTEN OPINION

International application No.

PCT/US02/06265

I. Basis of the opinion

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed
- ☒ the description:
 pages 1-18, as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____
- ☒ the claims:
 pages 19-26, as originally filed
 pages NONE, as amended (together with any statement) under Article 19
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____
- ☒ the drawings:
 pages 1-10, as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages NONE, as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

- ☒ the description, pages NONE
- ☒ the claims, Nos. NONE
- ☒ the drawings, sheets/fig NONE

5. ☐ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."

Form PCT/IPEA/408 (Box I) (July 1998)

WRITTEN OPINION

International application No.
PCT/US02/06265**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)	Claims 6-9, 12-14, 18-20, 24 and 26-36	YES
	Claims 1-5, 10, 11, 15-17, 21-23 and 25	NO
Inventive Step (IS)	Claims 6-9, 12-14, 18-20, 24 and 26-36	YES
	Claims 1-5, 10, 11, 15-17, 21-23 and 25	NO
Industrial Applicability (IA)	Claims 1-36	YES
	Claims NONE	NO

2. CITATIONS AND EXPLANATIONS

Claims 1-5, 10-11, 15-17, 21-23, and 25 lack novelty under PCT Article 33(2) as being anticipated by Kelton James Robert et al. (US 5,802,044-in record), hereinafter referred to as Kelton.

Regarding claims 1-5, and 10-11, 15-16, Kelton discloses a multicarrier reverse link timing synchronization system, device and method in which the steps of determining a receiver symbol timing adjustment and adjusting the symbols timing of a transmitter of a transmitter are taught, see abstract, column 12, lines 62-65, and column 13, lines 19-45.

Regarding claims 16, 21-23, and 25, Kelton discloses a multicarrier reverse link timing synchronization system, device and method. The system comprises a base station unit and a mobile subscriber unit in which the steps of determining a receiver symbol timing adjustment and adjusting the symbols timing of a transmitter of a transmitter are taught, see abstract, column 12, lines 62-65, and column 13, lines 19-45.

Claims 6-9, 12-14 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a method for adjusting symbol timing in a first communications device, the method includes a step in which delaying the transmission of symbols includes the step of adding 10 samples to a symbol transmitted by the transmitter thereby increasing symbol duration of the symbol, in combination with other limitations.

Claims 18-20 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a mobile communications device that comprises means for selecting a symbol to be transmitted to be lengthened or shortened prior to transmission to implement the symbol timing adjustment, in combination with other limitations.

Claim 24 meets the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a communication system that comprises a transmitter circuit wherein the transmitter timing control circuitry of the first mobile communication device includes means for independently adjusting the symbol timing of symbols transmitted to the first and second base stations, in combination with other limitations.

Claim 26-36 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a method of making symbol timing adjustments in a communications device including a transmitter which transmits multiple symbols in each of a plurality of dwells, the method comprises a step of decreasing the number of samples in one of the first symbol and the last symbol so the dwell by the determined number of samples when the symbol timing is to be advanced during the dwell by the determined number of samples, in combination with other limitations.

Form PCT/IPEA/408 (Box V) (July 1998)

WRITTEN OPINION

International application No.
PCT/US02/06265

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

TIME LIMIT:

The time limit set for response to a Written Opinion may not be extended, 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.

Form PCT/IPEA/408 (Supplemental Box) (July 1998)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference FLARION-4/PC	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US02/06265	International filing date (day/month/year) 04 March 2002 (04.03.2002)	Priority date (day/month/year) 09 March 2001 (09.03.2001)
International Patent Classification (IPC) or national classification and IPC IPC(7): H04L 7/033, 27/66 and US Cl.: 370/208, 350, 375/364		
Applicant FLARION TECHNOLOGIES, INC.		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of ____ sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>		
Date of submission of the demand 06 September 2002 (06.09.2002)	Date of completion of this report 28 May 2004 (28.05.2004)	
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Duc Ho Telephone No. 703-305-1332	

Form PCT/IPEA/409 (cover sheet)(July 1998)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International Application No.

PCT/US02/06265

I. Basis of the report

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed.
- ☒ the description:
 pages 1-18 as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____
- ☒ the claims:
 pages 19-26 as originally filed
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- ☐ the sequence listing part of the description:
 pages NONE as originally filed
 pages NONE, filed with the demand
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2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
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- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

- ☒ the description, pages NONE
- ☒ the claims, Nos. NONE
- ☒ the drawings, sheets/fig NONE

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

Form PCT/IPEA/409 (Box I) (July 1998)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International Application No.
PCT/US02/06265

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. STATEMENT

Novelty (N)	Claims 6-9, 12-14, 18-20, 24, 26-36	YES
	Claims 1-5, 10, 11, 15-17, 21-23, and 25	NO
Inventive Step (IS)	Claims 6-9, 12-14, 18-20, 24 and 26-36	YES
	Claims 1-5, 10, 11, 15-17, 21-23, and 25	NO
Industrial Applicability (IA)	Claims 1-36	YES
	Claims NONE	NO

2. CITATIONS AND EXPLANATIONS

Claims 1-5, 10-11, 15-17, 21-23, and 25 lack novelty under PCT Article 33(2) as being anticipated by Kelton James Robert et al. (US 5,802,044-in record), hereinafter referred to as Kelton.

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Regarding claims 16, 21-23, and 25, Kelton discloses a multicarrier reverse link timing synchronization system, device and method. The system comprises a base station unit and a mobile subscriber unit in which the steps of determining a receiver symbol timing adjustment and adjusting the symbols timing of a transmitter of a transmitter are taught, see abstract, column 12, lines 62-65, and column 13, lines 19-45.

Claims 6-9, 12-14 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a method for adjusting symbol timing in a first communications device, the method includes a step in which delaying the transmission of symbols includes the step of adding D samples to a symbol transmitted by the transmitter thereby increasing symbol duration of the symbol, in combination with other limitations.

Claims 18-20 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a mobile communications device that comprises means for selecting a symbol to be transmitted to be lengthened or shortened prior to transmission to implement the symbol timing adjustment, in combination with other limitations.

Claim 24 meets the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a communication system that comprises a transmitter circuit wherein the transmitter timing control circuitry of the first mobile communication device includes means for independently adjusting the symbol timing of symbols transmitted to the first and second base stations, in combination with other limitations.

Claim 26-36 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a method of making symbol timing adjustments in a communications device including a transmitter which transmits multiple symbols in each of a plurality of dwells, the method comprises a step of decreasing the number of samples in one of the first symbol and the last symbol so the dwell by the determined number of samples when the symbol timing is to be advanced during the dwell by the determined number of samples, in combination with other limitations.

Form PCT/IPEA/409 (Box V) (July 1998)